

OIB - P-3 Orion 11/04/17 Science Report

Aircraft: [P-3 Orion - WFF](#) ([See full schedule](#))

Date: Saturday, November 4, 2017

Mission: OIB

Mission Location: Antarctica

Mission Summary:

This mission represents a continuation of the IceBridge time series, almost repeating the near-shore flight line flown in 2009 and 2010 and the Endurance flight line from many OIB Antarctic campaigns along rough sea ice near the coast. For 2016 onward we replaced the near-shore line with a nearby IceSat-2 ground track covering the central beam pair.

Overall, it was a good day for data collection with weather having no impact on the measurements. DMS had 16 minutes of data with a frosted window which led to some fuzzy images. The ATM narrow scan instrument lost a few minutes of data in the middle of the flight due to an instrument lockup but otherwise performed well. The snow radar noise issue seen on the previous sea ice flight was not present this time. The gravimeter performed well though with ground station stuck in the sea cargo data gaps may be possible along the line.

Data volumes

ATM: T6: 57 Gb T7: 65 Gb

FLIR: 7.0 Gb

Cambot: 30 Gb

KT19: 12 Mb

DMS: 62.3 Gb

MCoRDS: 10.0 Gb, calibration data only

Gravity/Magnetometer: 3 Gb

Accumulation radar: 154 Gb

Snow/Ku radar: 620 Gb

data on: 1616

data off: 1916

Submitted by: Nathan T. Kurtz on 11/04/17

File:

 [endurance_west_map.pdf](#)

Related Flight Report:

P-3 Orion 11/04/17

Flight Number: OIB-Ushuaia Science Flight #4

Payload Configuration: OIB - Ushuaia 2018

Nav Data Collected: No

Total Flight Time: 9.3 hours

Submitted by: Janet Letchworth on 11/05/17

Flight Segments:

From:	SAWH	To:	SAWH
Start:	11/04/17 13:40 Z	Finish:	11/04/17 22:57 Z
Flight Time:	9.3 hours		
Log Number:	18P006	PI:	Nathan Kurtz
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
Purpose of Flight:	Science		
Comments:	OIB successfully completed the Endurance West sea ice mission today.		

Flight Hour Summary:

	18P006
Flight Hours Approved in SOFRS	151
Total Used	156

Total Remaining					-5	
18P006 Flight Reports						
Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
10/17/17	OIB - Airworthiness Test Flight	Check	1.1	1.1	149.9	
10/18/17	OIB - Project Test Flight	Check	3.5	4.6	146.4	
10/19/17	OIB PTF - Radar	Check	4.5	9.1	141.9	
10/23/17	OIB - Transit leg #1	Transit	7.1	16.2	134.8	
10/24/17	OIB - Transit leg #2	Transit	6.5	22.7	128.3	
10/25/17	OIB - Transit leg #3	Transit	7	29.7	121.3	
10/29/17 - 10/30/17	OIB-Ushuaia Science Flight #1	Science	9.7	39.4	111.6	
10/31/17	OIB-Ushuaia Science Flight #2	Science	8.9	48.3	102.7	
11/03/17	OIB-Ushuaia Science Flight #3	Science	9	57.3	93.7	
11/04/17	OIB-Ushuaia Science Flight #4	Science	9.3	66.6	84.4	
11/12/17	OIB-Ushuaia Science Flight #5	Science	9.5	76.1	74.9	
11/14/17	OIB-Ushuaia Science Flight #6	Science	9.8	85.9	65.1	
11/16/17	OIB-Ushuaia Science Flight #7	Science	9.1	95	56	
11/21/17	OIB-Ushuaia Science Flight #8	Science	9.4	104.4	46.6	
11/22/17 - 11/23/17	OIB-Ushuaia Science Flight #9	Science	9.9	114.3	36.7	
11/24/17	OIB-Ushuaia Science Flight #10	Science	9.6	123.9	27.1	
11/25/17 - 11/26/17	OIB-Ushuaia Science Flight #11	Science	9.5	133.4	17.6	
11/27/17	OIB-Ushuaia SAWH-SCDA Transit Flight	Transit	7	140.4	10.6	
11/28/17	OIB-Ushuaia SCDA-MROC Transit Flight	Transit	7	147.4	3.6	
11/29/17	OIB-Ushuaia MROC-KNGU Transit Flight	Transit	6.3	153.7	-2.7	
11/29/17	OIB-Ushuaia KNGU-KWAL Transit Flight	Transit	0.8	154.5	-3.5	
12/04/17	OIB-Post Mission Calibration Flight	Science	1.5	156	-5	

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

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